Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554



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| In the Matter of | ) | |
| | ) | |
| Telecommunications Services | ) | |
| Inside Wiring | ) | CS Docket No. 95-184 |
| | ) | FCC 95-504 |
| | ) | |
| Customer Premises Equipment | ) | |



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# AMERITECH'S COMMENTS

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Ameritech offers the following initial comments on the Notice of Proposed Rulemaking released in this docket on January 26, 1996 ("NPRM"). In the NPRM, the Commission solicits views on a variety of proposals to bring more parity between its telephone and cable premises wire rules and policies.[1] These proposed changes in the Commission's rules are intended to reflect the increasingly converging nature of telephone service and cable service in the telecommunications marketplace.

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[1] The term "premises wire" generally is used in these comments to refer to "telephone inside wire" and "cable home wire."

I.

## INTRODUCTION AND SUMMARY

The current rules for telephone and cable premises wire were developed in very different environments. In the past, cross-ownership rules generally restricted telephone companies from providing cable service and state franchise requirements generally restricted cable operators from providing local telephone service. Therefore, telephone companies offered only telephone service over telephone inside wire, and cable providers offered only cable service over cable home wire. Telephone inside wire typically was copper, and cable home wire typically was coaxial, and each type of wire had different technical parameters. Each service was also regulated differently.

Much of this has changed. The cross-ownership rules now are gone and so are the state franchise requirements. Telephone companies are beginning to offer cable service, and cable operators are beginning to offer telephony, and they are doing so with technologies and networks which are becoming increasingly similar. In fact, various broadband and narrowband services may be provided over the same premises wire.

As a result of these changes, the Commission is beginning to consider rules based on the service provided, rather than the identity of the provider.

This makes good sense. Differences between telephone and cable premises wire rules in the converging telecommunications marketplace can cause customer confusion and impede the development of competition. Development of a uniform set of premises wire rules which apply to telephone and cable companies alike, to the extent technically feasible and economically reasonable, can do much to reduce customer confusion and promote customer choice among competing providers of a variety of narrowband and broadband services.

Ameritech therefore favors a common set of premises wire rules, and makes the following specific comments with respect to the common rules which the Commission should adopt:

Demarcation Point

* As a general rule, the demarcation point for all single tenant residences or buildings should be at a location no more than 12 inches from the point of entry to the building (inside or outside the building) or the closest practical point to the point of entry, provided that the point is reasonably accessible to competing providers. This general rule should apply whether broadband or narrowband applications are provided over the wire.

- Where these residences or buildings are clustered together, it should be permissible that a single demarcation point serve multiple residences or buildings at a point outside a given residence or building or at a point located within a designated common area for all of the residences or buildings.

- For a multi-story, multi-tenant residence or business building, it should be permissible to locate the demarcation point at a designated

common area for each level or a single demarcation point located in a designated common area at the point of entry to the building.

* The application of this general rule should be tempered by the requirements of the subscriber or premises owner (particularly in a MDU building), as well as architectural considerations and the technical characteristics of the service being delivered to the premises, provided that competitors are given reasonable access to the demarcation point.

Signal Leakage

* Signal leakage monitoring and reporting requirements should apply to all broadband analog services, regardless of the provider.

* However, if the technology actually used to provide a particular broadband analog service or the carriage of broadband digital service does not create the risk of harmful signal leakage, then the requirements should not apply at all, again to any provider.

Technical Connection Parameters

* The Commission should defer to industry technical fora for development of connection standards but once those standards are adopted, they should be applied to all providers.

* Signal quality should be "regulated" by the marketplace.

Subscriber Ownership and Access to Inside Wire

* Premises wire that carries broadband services should be governed by the same rules which govern premises wire that carries narrowband services.

* Control of all premises wire should be vested with the subscriber or the building owner; ownership of new premises wire should vest with the subscriber or building owner at the time of installation.

Dual Regulation of Premises Wire

* The Commission should try to do all it can to harmonize the dual systems of regulation that have developed around premises wire.

* However, the Commission should not harmonize those rules by increasing the regulation of customer premises equipment or any other aspect of narrowband or broadband service.

Ameritech believes that these rules will help provide a regulatory framework that is flexible enough to accommodate new services which evolve over time, they will increase competition and expand customer choice in the converging telecommunications marketplace.

## II.

## THE COMMISSION SHOULD ADOPT A COMMON SET OF RULES TO GOVERN TELEPHONE AND CABLE PREMISES WIRE.

Ameritech favors the establishment of common rules for premises wire which would apply to both telephone companies and cable operators,[2] regardless of the type of wire, and regardless of the type of service being provided over the wire. In a converging marketplace where telephone companies and cable operators are providing a variety of broadband services,

[2] For that matter, the same rules should apply to any other similarly situated provider.

including telephony and cable, different regulations for premises wire based on the identity of the provider no longer are reasonable or necessary, especially where different services are provided over the same wire. The Commission will have difficulty knowing which set of rules should be enforced in a given situation. Providers will not be certain which set of rules applies. Some may even try to assert one and then the other set of rules for the same premises wire, depending on which set of rules will further their own competitive interests at a given point in time or with respect to a particular issue. Customers and premises owners will be hopelessly confused and this will impede the easy transfer of service from one provider to another.

To avoid these problems, to promote competition among providers of various broadband and narrowband services, and to increase customer choice with respect to those services, the Commission should adopt one set of rules that will apply to all premises wire.

III.

## THE COMMISSION SHOULD ADOPT A COMMON DEFINITION FOR THE DEMARCATION POINT FOR BOTH TELEPHONE AND CABLE PREMISES WIRE.

As narrowband and broadband services converge, it will become increasingly important to have a common demarcation point for each service. This will be particularly true where telephony and cable programming signals are split at the demarcation point in order to route the signals to the appropriate equipment on the customers' premises. Different demarcation points based on technical distinctions between the type of wire used to deliver the service (i.e. narrowband v. broadband) actually could create an incentive for the provider to use a less efficient technology simply to leverage rule-based differences which may advantage the provider in a particular circumstance. This could skew the marketplace in a manner the Commission does not intend and may not even be able to predict. Instead, the Commission should remain technology neutral and simply adopt a common set of rules to govern all premises wire.

As a general rule, the demarcation point for all single tenant residences or buildings should be at a location no more than 12 inches from the point of entry to the building (inside or outside the building) or the closest practical point to the point of entry, provided that the point is reasonably accessible to competing providers. Where these residences or buildings are clustered together (e.g., attached townhouses, or a complex of businesses or residences),

it should be permissible that a demarcation point serve multiple residences or buildings at a point outside a given residence or building or at a point located within a designated common area for all of the residences or buildings. For a multi-story, multi-tenant residence or business building, it should be permissible to locate the demarcation point at a designated common area for each level or a single demarcation point located in a designated common area at the point of entry to the building.

However, application of the general rule must be tempered based on the requirements of the subscriber or premises owner, as well as the architectural considerations of the building and technical characteristics of the service being provided. This adds an element of flexibility to the general rule, flexibility that is needed because strict application of the general rule in all circumstances, without exception or variance, simply will not serve customers well. As long as it is the subscriber or building owner (as opposed to the service provider) that requires a variance from the general rule and as long as competitors continue to have reasonable access to the demarcation point, this flexible approach will promote the customers' interests and will further the Commission's pro-competitive goals.

Besides, a rigid, one-size-fits-all rule simply will not work. For example, a MDU building owner, with or without loop-through wiring, may want to establish a demarcation point at a minimum point of entry. If

amplifiers are required to support a particular service, the owner of a MDU building without loop-through wiring may want to establish the demarcation point closer to the subscriber, such as in a closet on each floor. Some buildings, including but not limited to MDU buildings, may have architectural characteristics which require the location of a demarcation point in a particular area of the building. A security-minded owner of a detached, single family dwelling who subscribes to an alarm service that is carried over telephone or cable wire may not want the wire exposed outside of the physical building and may insist that the provider bury the wire, enter the dwelling below grade and then establish a demarcation point inside the premises. Another home owner with alarm service may prefer a demarcation point on the outside of the residence, but may require metal conduit for the wire. The Commission's demarcation rules must be flexible enough to accommodate each of these unique arrangements and others which customers undoubtedly will demand in the future.

Attached as exhibits to these comments are several diagrams depicting various types of premises and the demarcation points Ameritech recommends as a variation to the general rule for the premises depicted.

* Exhibit 1 is a typical detached, single family dwelling or small business building. The network interface device is mounted at the demarcation point on the outside of the building no more than 12

inches from the point of entry (inside or outside the building), or the closest practical point to the point of entry.

* Exhibits 2, 3 and 4 depict service variations for the same type of structure. Exhibit 2 shows a typical cluster of attached single family residences or small businesses with ground level access to all units. Here, each unit is treated like a single building with network interface devices mounted at the demarcation point for each unit, on the outside of the unit no more than 12 inches from the point of entry (inside or outside the building), or the closest practical point to the point of entry.

* Exhibit 3 is like Exhibit 2 except for the presence of a common area. A network interface device is mounted at the demarcation point located in the common area and all units are treated as a single building. Premises, or inside, wire is dedicated to each individual unit and runs through interior conduit from the demarcation point to, and into, each unit.

* Exhibit 4 shows the service configuration for a typical cluster of attached single family residences or small businesses with no common area but with interior or exterior conduits meeting at a single location on the exterior of the building. Here, each unit is treated as a separate building but, for one reason or another, multiple demarcation

points are not permitted or are not practical. The network interface device is mounted at the location where the conduits meet; it serves as the demarcation point for all of the units. Dedicated premises wire for each individual unit runs through the conduit from the demarcation point to, and into, the unit.

* Exhibit 5 shows the service configuration for a typical MDU with multiple demarcation points. Demarcation point locations may be dictated by the technical characteristics of the service provided (i.e. alarm service), subscriber/building owner requirements, or architectural constraints. Network interface devices are mounted at the demarcation points which are located in common areas in the building. Dedicated premises wire runs to each unit from its assigned demarcation point.

* Exhibits 6 and 7 represent two variations of a service configuration for a typical MDU building with a single demarcation point located in a common area. Dedicated premises wire for each individual unit runs from the single demarcation point to, and into, the unit.

* Exhibit 8 shows the service configuration for a typical mixed use (i.e. office/retail) MDU with multiple demarcation points.

Demarcation point locations, again, may be dictated by service characteristics, customer/owner requirements or architectural factors. Network interface devices are mounted at the demarcation points located in common areas of the building. Dedicated premises wire runs to each unit from its assigned demarcation point.

* Exhibit 9 shows the service configuration for a typical mixed use strip mall with multiple demarcation points. Again, demarcation point locations may be dictated by the factors cited above. Network interface devices are mounted at the demarcation points which are located in this example at the outside rear of the shops and in a common area of the office building. Dedicated premises wire runs to each unit from its assigned demarcation point.

These exhibits show the kind of demarcation points which must be accommodated by any Commission rules prescribed in this docket. Insofar as those rules apply equally to all service providers -- including telephone companies and cable operators alike -- and ensure that all providers have reasonable access to the demarcation point regardless where the customer requires it to be located, premises wire will not constitute a barrier to increased competition among various service providers and will not inhibit customer choice in this converging telecommunications marketplace.

## IV.

## SUBSCRIBERS OR BUILDING OWNERS SHOULD BE ABLE TO CONTROL THEIR PREMISES WIRE.

Ameritech supports the Commission's tentative conclusion that there is no reason to change the current rules on customer access to narrowband (traditionally, telephone) inside wire. Under those rules, subscribers and building owners have complete access to, and control over, their telephone inside wire. The only change needed in this area is for the Commission to establish similar rules for customer access to broadband wiring prior to voluntary termination of service, whether the wiring carries cable service, telephone service, both types of service or broadband services generally.

The Commission's deregulation of telephone inside wire represented good public policy when that action was taken years ago and it continues to represent good public policy now. It benefited individual customers by giving them more choices with respect to the installation and maintenance of their telephone inside wire and produced cost savings. It benefited society generally because it encouraged technological innovation and facilitated the development of a multi-provider/multi-service marketplace by promoting market entry. Extending the telephone inside wire rules to cable home wire could have the same beneficial effects with respect to broadband services. The Commission could augment this rule by creating a rebuttable presumption that the customer already owns the premises wire, thereby requiring the cable

operator to demonstrate otherwise based, for example, on property and accounting records, and the applicable state property law on fixtures.

In addition to giving customers unfettered access to, and control of, embedded cable home wire, the Commission should adopt a policy which grants subscribers and/or building owners the option to purchase cable inside wire upon installation, on a going-forward basis. Requiring a cable operator to give the customer this option at the time of installation could have the effect of reducing the confusion over who owns the wire at the point service is voluntarily terminated. While it is not necessary at this time for the Commission to prescribe specific rules with respect to payment for the wire,[3] the Commission should require the provider, at the time of installation, to give the customer the information necessary to make an informed choice on whether or not to exercise the option.

## V.

## TO THE EXTENT SIGNAL LEAKAGE IS A PROBLEM, THE COMMISSION'S SIGNAL LEAKAGE RULES SHOULD APPLY TO ALL PROVIDERS.

The Commission suggests that various new broadband analog services will be delivered to customers over the same aeronautical and public safety frequencies, and at the same level of power, as are cable television signals. To

[3] The purchase price should be based on the replacement cost standard in 47 CFR Section 76.802 and could be billed as a one-time charge to the subscriber or building owner at the time service is instituted.

minimize the risk of cable television interference with the aeronautical and public safety uses of these frequencies, the Commission has prescribed rules which limit individual leakage levels, cumulative leakage levels and frequency separation from over-the-air users. The Commission asks whether these cable signal leakage rules should be extended to other providers of broadband analog services.

Ameritech believes the answer to that question is "yes." If signal leakage is a potential problem associated with the provision of cable services because of cable's use of broadband facilities, and others will be providing analog services using the same type of broadband facilities, then the Commission's signal leakage rules should apply to those providers, as well.

However, the current rules are based on the assumption that cable services are delivered using a broadband analog facility with a bandwidth that intersects, and therefore may interfere, with other communications within spectrum blocks allocated for aeronautical and public safety use. Digital transmission techniques may allow broadband transport on facilities which may not interfere with those aeronautical and public safety bands. In those cases, the Commission's signal leakage rules should not apply.

VI.

## THE COMMISSION SHOULD RELY ON THE INDUSTRY TO DEVELOP CONNECTION STANDARDS FOR INDUSTRY-WIDE APPLICATION.

The Commission has prescribed technical specifications for jacks that interface with the telephone network, but has not prescribed any similar requirement for the cable industry. The Commission asks in the NPRM whether it should establish common technical standards for connections to cable networks or broadband services where multiple services are delivered over a single wire, or whether it should prescribe common technical standards for connection to cable or telephone networks. The Commission should do neither, at least at this time.

Ameritech agrees with the Commission that common technical standards for connection to cable and telephone networks would foster competition, lower costs, speed the installation of services and facilitate standardized testing of facilities at the point they enter a premises. But that standard should be developed in open industry fora[4] and, to the extent possible, should be the result of an industry consensus.[5] This type of process would be especially important if various kinds of services (e.g. broadband

[4] These industry fora exist today, e.g. ANSI, TIA and EIA. The Commission needs only to charge them to address this issue.

[5] If no consensus can be achieved within the industry, the Commission could prescribe a standard based on the information developed in the industry fora.

data, video and/or telephony) are offered over the same conductor that enters the customer's premises.

Nor would it be a good idea for the Commission to regulate the quality of the connections to broadband services. Rather, natural marketplace solutions should be given the opportunity to work. Providers of high quality service will be rewarded in the marketplace; providers of low quality service will be punished. If competition in this market does not evolve in the manner anticipated by the Commission and overall quality suffers, the Commission then can consider other options which may be in the public interest.

## VII.

## THE COMMISSION SHOULD DO ALL IT CAN TO HARMONIZE THE DUAL SETS OF REGULATION OF PREMISES WIRE, BUT SHOULD NOT INCREASE THE AMOUNT OF REGULATION IN THE PROCESS.

The Commission recognizes that the convergence of cable and telephony in the telecommunications marketplace is likely to blur the lines between the different regulatory rules which were developed at a time when these lines of business were more separated and which today are applied by different regulatory bodies. This is a significant issue and one that extends

beyond the Commission's premises wire rules.[6] But as it relates to premises wire, the Commission's rules should be the same whether cable or telephone service is involved.

The Commission must be careful, however, not to harmonize these different sets of premises wire rules in a manner that increases the overall regulatory burden contrary to the public interest.[7] This can be avoided by moving the cable home wire rules closer to the rules governing telephone inside wire, rather than vice versa. The telephone rules, after all, give the subscriber and/or building owner unfettered access to, and control over, their inside wire. Application of those telephone inside wire rules to cable home wire would extend these benefits to the cable context, would result in the least regulation and would produce the best overall result from the customers' point of view.

## VIII.

## THERE IS NO ACCESS TO PRIVATE PROPERTY PROBLEM FOR THE COMMISSION TO SOLVE.

The Commission suggests that "[p]arity of access rights to private property may be a necessary predicate for any attempt to achieve parity in the

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[6] For example, this Commission and state public utility/service commissions continue to play a role in price regulation of telephone services, whereas cable rates are established in conjunction with municipal regulation.

[7] Thus, Ameritech is opposed to any Commission action that would have the effect of reregulating any telephone inside wire that currently is unregulated.

rules governing cable and telephone network inside wiring, because without access to the premises, the inside wiring rules and proposals discussed in this NPRM will not even be implicated."[8] Based on this supposition, the Commission asks a series of questions about the relative rights of telephone companies and cable operators to access private property.

In the past, a telephone company typically has been granted access to private property by the property owner who wanted the company to provide telephone service to the premises. Anticipating that such access would be required, owners of parcels routinely have included easements and rights-of-way for such use when dedicating land for development. The specific use could be the burying of cable or conduit or the placement of poles for aerial facilities. Where necessary access to real property is denied, utilities generally can exercise rights of eminent domain under certain limited circumstances and according to very exacting procedures.

Cable operators have similar, though perhaps not identical, access to private property. In fact, given that cable operators at the end of 1994 had a national penetration rate 65.2% and had facilities installed which passed 96% of the television households in the nation,[9] it is apparent that cable operators

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[8] NPRM at par. 61.

[9] See In the Matter of Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, Second Annual Report, CS Docket No. 95-61, rel. December 11, 1995, at par. 7

have not had insurmountable problems gaining access to private property in order to provide cable service. Many states historically have required pubic utilities to provide cable operators with access to poles, conduit and rights-of-way, and that access now will be a national requirement under the provisions of the Telecommunications Act of 1996.[10] Thus, cable operators and telephone companies, as a practical matter, will have the benefits of essentially the same statutory rights to access private property to provide service.

Where there is no statutory right to access private property, cable operators and telephone companies alike will be required to negotiate access rights with property owners. Those owners will have an incentive to grant reasonable access rights if the company seeking the access provides high quality, low cost services to which the owners, or their tenants, want to subscribe. Therefore, the best way for the Commission to promote open access to private property is for it to foster an environment where multiple providers of high quality, low cost services are available to customers. The demand for those services will precipitate open access -- naturally, voluntarily and according to market-based terms and conditions.

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[10] See Section 703(f)(1) amending 47 U.S.C. Section 224 which now requires that "[a] utility shall provide a cable television system or any telecommunications carrier with nondiscriminatory access to any pole, duct, conduit, or right-of-way owned or controlled by it."

IX.

## THE COMMISSION MUST ENSURE THAT ANY ACTION IT TAKES WITH RESPECT TO DEREGULATION OF CABLE CPE PROTECTS THE INTEGRITY OF THE SYSTEM AND PROTECTS AGAINST THEFT OF SERVICE.

The Commission notes in the NPRM that its deregulation of telephone CPE has resulted in a number of benefits, including increased competition among communications equipment vendors and cost savings to customers. The Commission then asks whether the same benefits will result from the deregulation of cable CPE so as to allow customers to provide and connect unregulated CPE to cable operator facilities. The Commission says that any such deregulation of cable CPE must be done in a manner that protects the integrity of the cable system and protects against theft of service.

In addition, the Commission specifically notes that it is not proposing in this docket to change its current rules for equipment connected to narrowband facilities, or for equipment used in connection with only Title II services.[11] Rather, the Commission proposes that CPE used in connection with Title VI services provided over narrowband facilities should be governed by the same rules that apply in the traditional telephony context.

Ameritech agrees with the Commission that any deregulation of cable CPE must be undertaken in a way that protects the integrity of the cable

[11] And the Commission makes clear that it is not proposing in this docket to re-regulate currently deregulated telephone CPE rates. NPRM at par. 76.

system and protects against theft of service. In the case of telephone service, a subscriber must make a connection to a central office and that is a natural point where information to ensure network integrity can be collected. However, given the broadcast nature of many cable services, theft of service is much more difficult to detect. The Commission must continue to recognize that this problem must be an integral part of any deregulation initiative for cable CPE.

Moreover, as it considers whether to extend its Part 68 rules to cable CPE, the Commission should recognize that those rules were promulgated, in part, to accommodate multiple CPE providers. Yet, multiple providers of cable CPE do not exist, in part, because of the unique theft of service problems encountered in the cable industry. Until this theft of service issue is resolved such that multiple providers for cable CPE can emerge, the Commission should not consider extending its Part 68 rules to cable CPE.

Finally, there is no reasonable basis for the Commission to adopt any CI-II or CI-II-like separate subsidiary requirements for cable CPE. Those requirements simply are not necessary and would be contrary to the spirit of the Telecommunications Act of 1996 wherein the Congress established the areas (not including cable CPE) where separate subsidiaries would be required.

X.

## CONCLUSION

Different rules for premises wire based on the historical line of business of the provider that originally installed the wire no longer make sense now that the wire will be used by a variety of providers to deliver a variety of services. The Commission should take the steps recommended in these comments to harmonize those different sets of rules and should do so in a manner that meets the requirement of customers and promotes competition among providers of the various services which will be carried over that premises wire.

Respectfully submitted,

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